DOCUMENT RESUME

ED 143 323 IR 004 886

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TITLE Organization and Implementation of Instructional Development in Higher Education: Some Basic Considerations.
PUB DATE Apr 77
NOTE 20p.; Paper presented at the annual meeting of the Association for Educational Communications and Technology (Miami, Florida, April 26, 1977)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS College Faculty; College Instruction; Colleges; *Higher Education; *Instructional Design; *Instructional Improvement; Literature Reviews; Models; *Program Development

ABSTRACT

Issues related to the development and implementation of instructional development programs to assist faculty in improving the effectiveness and efficiency of collegiate instruction are discussed from a review and synthesis of the literature. Three different approaches to instructional improvement programs are identified and described. While the literature suggests that some systematic approach can be used to produce solutions to educational problems, there is disagreement among professionals as to the size or scope of the problems to be solved by instructional development programs. Two approaches for generating projects are also discussed. Advice from the literature indicates eight concerns identified as most important to the implementation of such programs in higher education: (1) administrative commitment; (2) administrative location of instructional development agencies; (3) institutional reward structure; (4) instructional development procedures; (5) team approach to instructional development; (6) faculty development; (7) maximizing impact; and (8) evaluation. References are appended. (JPF)

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ORGANIZATION AND IMPLEMENTATION OF INSTRUCTIONAL DEVELOPMENT IN HIGHER EDUCATION: SOME BASIC CONSIDERATIONS

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Paper Presented at the Annual Meeting of
the Division of Instructional Development
Association for Educational Communications and Technology
April 26, 1977
Miami, Florida

IR004886

Introduction

This paper represents a synthesis of the literature concerning instructional development programs which are intended to assist faculty in improving the effectiveness and efficiency of collegiate instruction. The primary focus of the paper is on issues related to the organization and implementation of such services rather than on specific instructional design procedures or models used by various agencies.[1] No attempt is made here to review theories, research evidence, or procedures used in the design or evaluation of instruction. Consideration of these issues is beyond the scope of this paper. General reviews and discussions of such topics may be found in sources such as: Baker (1973), Baker and Schutz (1971), Diamond et al. (1975), and Gerlach and Ely (1971).

The paper consists of two major parts. Part one provides a frame of reference about the goals and roles of instructional development agencies developed from a review of literature. The second part offers "advice" from the literature about eight concerns which are important to the implementation of instructional development programs in higher education.

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[1]For information about the nature of particular instructional development agencies see L. T. Alexander and S. L. Yelon (Eds.), Instructional development agencies in higher education. East Lansing, Mich.: Michigan State University, Learning Service, 1972.

Instructional Development--A Frame of Reference

A Definition of Instructional Development

Despite the many different points of view held on various issues by authors writing about instructional development, there is general agreement that instructional development implies some sort of systematic approach to the design or improvement of instruction. Jerry Gaff (1975 b) offered a clear, simple definition of instructional development:

> Instructional development is a recent academic specialization that may be defined as the systematic and continuous application of learning principles and educational technology to develop the most effective and efficient learning experiences for students. (p. 47)

When the term "instructional development" is used in this paper it will be in the sense of Gaff's definition.

Approaches to Instructional Improvement

Not all instructional improvement programs approach the task in the same manner. In fact, different agencies often view the same symptoms as relating to different problems. Following a study of instructional improvement programs for the Exxon Education Foundation, Gaff (1975 a) observed:

> Although all instructional improvement programs are designed to raise the quality of teaching and learning, these programs vary considerably. Depending on what aspects of the teaching-learning process they emphasize, they may be categorized in one of three ways: as instructional development, faculty development, or organizational development. Each category draws on different intellectual traditions, makes different analyses about what ails teaching and learning, and prescribes different solutions. [emphasis added] (p. 94)

His book describing the results of the Exxon Study (1975 b) explained the differences among the three approaches. Instructional development, he thought, focuses on "courses or curricula, and . . . seeks to improve the conditions and materials that promote student learning" (p. 10). He

felt that the intellectual roots for this approach lay in curriculum and instruction, learning theory, educational media and technology, and systems theory. This view is generally in agreement with the views of the majority of those writing about instructional development.

He described the faculty development approach as one which "focuses on faculty members and seeks to promote their individual growth and development" (p. 8). He observed that such programs help faculty to explore their attitudes about teaching and learning and acquire more knowledge and skills related to the teaching-learning process. Gaff felt that "the intellectual underpinnings of faculty development are in clinical, developmental and social psychology, psychiatry, and the sociology of work and socialization" (pp. 8-10). The focus of this approach is on faculty members rather than the courses they teach.

Organizational development, he said, focuses on the institution as a whole or on some sub-unit such as a department or a division and "seeks to create a more effective environment within which teaching and learning can occur" (p. 10). This approach is based on organizational theory, organizational change, and group dynamics. The goal of organizational development is to develop administrative and interpersonal competencies among organization leaders and to develop policies that support teaching improvement. The table on page 4 summarizes the three approaches described by Gaff.

Gaff presented a useful way of distinguishing among the types of instructional improvement efforts; however, he did not attempt to evaluate the relative effectiveness of each approach in improving the teaching-learning process. He did, however, suggest that these approaches are complementary and should be combined in any comprehensive approach to the problem of

ALTERNATIVE CONCEPTIONS OF INSTRUCTIONAL IMPROVEMENT

	FACULTY DEVELOPMENT	*INSTRUCTIONAL DEVELOPMENT*	*ORGANIZATIONAL DEVELOPMENT*
Focus:	Faculty members	Courses or curricula	Organization
Purpose:	Promote faculty growth; help faculty members acquire knowledge, skills, sensitivities, and techniques related to teaching and learning.	Improve student learning; prepare learning materials; redesign courses; make instruction systematic.	Create effective environment for teaching and learning; improve interpersonal relationships; enhance team functioning; create policies that support effective teaching and learning.
Intellectual base:	Clinical, developmental, and social psychology; psychiatry; socialization.	Education, instructional media and technology, learning theory, systems theory.	Organizational theory, organizational change; group processes.
Typical activities:	Seminars, workshops, teaching evaluation.	Projects to produce new learning materials or redesign courses; workshops on writing objectives, evaluating students.	Workshops for group leaders or team members, action research with work groups, task forces to revise organizational policies.

SOURCE: J. G. Gaff, Toward faculty renewal. San Francisco: Jossey-Bass, 1975, p. 9.

instructional improvement. Diamond (1974), Buhl (1975), and others have commented on the need for a comprehensive approach to instructional improvement efforts without specifically referring to the types of categories used by Gaff.

Product Development or People Development

Professionals working within the field of instructional development are beginning to broaden their perspective of the field by expanding upon the kind of definition of instructional development presented by Gaff to include a concern for the development of faculty skills as well as the development of courses. Abedor and Gustafson (1971) pointed out that any product, no matter how well designed and validated, has a relatively short useful life compared to the length of time that a faculty member will be at an institution. This is particularly true now that faculty mobility is decreasing. Consequently, they argued that, in the long run, a faculty member who is committed to instructional development and has developed his/her skills in the process is likely to make a greater contribution to the improvement of teaching and learning at an institution than will the development of any single course. Beilby (1974) discussed the problem in economic terms, reasoning that the task of applying instructional development effectively to the public school setting "is too vast to be accomplished by any army of instructional developers we could realistically expect to produce" (p. 13). He also pointed out that school systems could not afford to hire the required number of instructional developers. The same problem of scale and economics applies to higher education.

There are drawbacks to the people development (or faculty development) approach. Holsclaw (1974) concluded that a development agency with a major

focus on people development may not generate tangible results as quickly as agencies which focus primarily on course development. Abedor and Gustafson (1971) also pointed out the time problem, adding that "people development takes considerably more time, effort, and money while the impact is difficult to measure--or predict" (p. 22). Schauer (1971) commented that, in the past, efforts by faculty to create innovation had not been as productive as he would have hoped and argued for some method of supporting their efforts. Diamond et al. (1975) observed that academic change is never easy. They emphasized that "It is often frustrating, sometimes traumatic, and, regardless of the investment, never guaranteed. It requires talented faculty, full administrative support, and purposeful direction" (p. 3).

The solution to the problem seems to be to incorporate both emphases in an instructional development program. Abedor and Gustafson (1971), Gustafson (1971), Hoban (1974), DeBloois and Alder (1973), and others have argued persuasively that instructional development agencies must strike an effective balance between product development and people development.

The Scope of Instructional Development Projects

The literature on instructional development describes a general agreement among professionals in the field of instructional development that a systematic approach should be used to produce solutions to educational problems. The disagreement among these professionals seems, however, to relate to the size or scope of the problems to be solved by instructional development. Some instructional developers concentrate on the development of small, discrete units of instruction and others concentrate on larger projects, such as the development of entire courses or whole curricula.

Eickmann (1975) suggested that one of the characteristics that differentiates among the various instructional development programs in the country is the scope of the projects undertaken. He listed five sizes of projects: (1) curriculum, (2) program, (3) course, (4) smaller than course, and (5) tiny.

Diamond (1971) made a strong plea for instructional development programs to concentrate on large-scale projects that will have major impact. This approach is often called the "major project" approach or the "concentrated" approach. The opposite approach, called the "shotgun approach," is to engage in a larger number of less intensive, smaller-scale, short-term projects. Diamond argued against the use of the shotgun approach. He felt that the goal of instructional development must be to create fundamental changes, and that to do so projects must be selected appropriately:

> Supporting numerous, small projects may make a lot of friends and keep our staff busy, but our long range impact will be minimal. This route takes too long to produce meaningful results. We should select major projects and do them well. Smaller efforts must be, in effect, pilot case studies designed to form a base for complete course or curriculum design. (p. 7)

Not all instructional developers agree that the "major project" approach is appropriate. Holsclaw (1974) interviewed a group of instructional developers, some of whom expressed the following reservations about large projects:

1. With a large project, you tie yourself up for a year and only satisfy one or two faculty members.
2. If you concentrate on one big course, you have a great impact within one department, but you end up having zero impact on other departments.
3. There are many political and financial obstacles in the way of the big projects.

(p. 97)

Within the field of instructional development, there is no universally accepted size for instructional development projects. It seems to depend on the mission that each development agency sees for itself. Alexander and Yelon (1972) summarized the choices facing an instructional development agency:

> An instructional development agency can invest its resources--time, energy, and money--in a large number of small projects or in fewer, more comprehensive projects. The choice of project size should depend on its impact. A large number of relatively small instructional projects produce an impact on many departments. Fewer, larger projects produce large changes within the target departments. The main criterion is the estimated probability of success. Projects that produce no definite results, or that are not implemented, produce frustration and disillusionment. (p. 13)

Project Generation and Selection

Diamond et al. (1975) identified two major methods to generating instructional development projects--the internal approach and the external approach. In the internal approach, the staff of the agency works directly with the administration, deans, and department chairpersons to identify high priority needs and to recruit the appropriate faculty to carry out the project. Little effort is made to sell the services of the agency to the faculty at large. Rather, the focus of this approach is to support only those projects which may potentially have maximum impact on the institution. They listed the advantages and disadvantages of the internal approach:

Advantages

(1) Better balance between priorities and projects.
(2) Fewer rejected projects.

Disadvantages

(1) The overall effort will begin slowly.
(2) Requires extensive administrative cooperation at both the department and college level.

(pp. 28-29)

In the external approach, a highly-publicized faculty grant program is initiated to encourage individual faculty members and departments to submit proposals for support by the agency. The scope of this support varies from agency to agency, depending on the context of the institution. The advantages and disadvantages of the external approach were also listed:

Advantages

(1) Generates many project requests.
(2) An excellent method of advertising administrative commitment to instructional improvement.

Disadvantages

(1) Many projects will be low-priority and of questionable quality.
(2) Faculty who are turned down may be antagonized.
(3) Close control of projects may be lost unless specific operational guidelines are built into the funding process.
(4) Coordination of projects to meet specific institution-wide goals may be limited.
(5) Political considerations for institutional balance may force awarding of grants to some high-risk, low-priority projects.

(p. 32)

Alexander and Yelon (1972) offered a set of four criteria which have been used to assess such proposals: "(1) the number of students affected, (2) evidence of an experimental approach, (3) potential application in other areas, and (4) the possibility of evaluation" (p. 9). They also added that the staff of the instructional development agency should stand ready to assist the faculty members in writing and carrying out the proposals. Diamond et al. (1975) went further and argued that, if quality is to be maintained with this approach, "then the control of every project must remain with the development unit rather than with the requesting department" (p. 32). They asserted that in cases where funds have been given directly to the departments without sufficient control, the results have been unsatisfactory.

DeBloois and Alder (1973) described the approach used at Utah State University which they felt combined the best aspects of the external approach with the need for developer control. The program consists of three phases of activity: Phase 1 involves awareness activities designed to make faculty aware of the available services and to circulate information about the teaching-learning process. Phase 2, faculty support activities, provides small grant awards to faculty to support limited efforts to improve their instruction and provides gratis support from the instructional development staff. Phase 3, instructional development activities, provides both financial support and assistance from the instructional development program for faculty who wish to initiate a full-scale development effort. They felt that this model represented a low-profile approach which cultivated faculty support for instructional development activities and provided for control by the instructional development agency.

Summary of Advice for Implementing Instructional Development Programs

This section of the paper is an attempt to summarize the advice from the literature regarding the implementation and operation of an instructional development program. While there are many issues which must be considered in the implementation of such a program, eight of the most important ones are discussed here.

Administrative Commitment

Major academic change requires serious administrative commitment in actions as well as words. Ideally, this commitment should include: (1) financial support for the program, preferably from "hard" institutional moneys rather than from short-term grants; (2) establishment of administrative procedures that facilitate change (a new credit system, flexible classroom

scheduling, etc.); (3) access to various institutional resources which may be necessary in the development process (such as computers, media support, etc.). Without a firm commitment to instructional change, the fate of any program is sealed almost before it starts (Buhl, 1975; Detweiler, 1973; Diamond, 1971; Diamond, 1974; Diamond et al., 1975; McMillan, 1975; Schauer, 1971).

Administrative Location of Instructional Development Agencies

In order to provide a catalyst for change and to support faculty in their attempts at innovation, some sort of instructional development agency or program should be established. The administrative location of such an agency or program should be such that it reports to the chief academic officer of the institution. Access to this level of administration is important since a wide-ranging instructional development program may have institution-wide impact and may necessitate institutional policy changes, reallocation of financial, material, and human resources, or may require other high-level administrative decisions and support (Alexander & Yelon, 1972; Detweiler, 1973; Diamond et al., 1975; Heinich, 1971).

Institutional Reward Structure

The institutional structure must reward faculty for quality teaching and innovation in instruction. Rewards such as campus recognition, faculty teaching awards, and the like are a step in the right direction, but they are not enough. The most effective rewards are in the nature of official recognition by the institution in terms of promotion, tenure, salary, and other marks of status. Instructional development agencies should play a part in attempting to change the institutional reward structure where necessary so that faculty may benefit in a concrete manner from their attempts

at innovation (Alexander & Yelon, 1972; Buhl, 1975; Detweiler, 1973; Diamond, 1974; Diamond et al., 1975; Gaff, 1975 a, 1975 b; Group for Human Development, 1974; Hoban, 1974; Holsclaw, 1974; McMillan, 1975).

Instructional Development Procedures

There are many different "models" or instructional development processes which are followed by various instructional development agencies. Each model represents a particular individual's or agency's method of applying a systematic process to the development of instruction. Little research exists to guide an agency in selecting or developing a model to follow, but the advice from the literature seems to be clear that some sort of instructional development procedure should be adopted and followed in order to facilitate the development process and assure communication among the individuals involved (Diamond, 1971; Diamond et al., 1975; Hamreus, 1971; Holsclaw, 1974; Lee, 1971; Schauer, 1971).

Team Approach to Instructional Development

The complex nature of the academic change process and the comprehensiveness of a systematic instructional development effort require many sets of talents and areas of expertise. The use of a team approach, involving several faculty members and various professionals in instructional development and evaluation, is highly recommended as a method for bringing varied human resources to bear on this complex task (Diamond et al., 1975; Faris, 1970; Gustafson, 1971; Lee, 1971; Schauer, 1971; Wittich & Schuller, 1973).

Faculty Development

Producing meaningful, long-range academic changes in higher education requires that faculty be effectively involved in the instructional development program. Attention should be paid to the development of faculty members' skills

in instructional development. The majority of opinions offered suggest that a major goal of any successful program should be for faculty to become instructional developers in their own right (Abedor & Gust..son, 1971; Beilby, 1974; Briley, 1971; DeBloois & Alder, 1973; Faris, 1970; Gaff, 1975 b; Group for Human Development, 1974; Gustafson, 1971; Gustafson, 1975; Hoban, 1974; Roueche and Boggs, 1970; Ullmer & Stakenas, 1971).

Various workshops and training sessions have been advanced as ways to achieve this objective; however, little data about the long-term effectiveness of these approaches are available. Hammons (1975) reported that short-term workshops by themselves have not proven to be effective in producing long-range change. He suggested that certain follow-up activities be included in order to maximize the impact of workshops. In addition, he listed a set of guidelines to be followed in the development of workshops intended to improve faculty skills in the teaching-learning process.

Maximizing Impact

To have maximum impact on institutional programs, instructional development agencies should identify the top priorities of the institution and choose projects which reflect these priorities. The goal should be to complete a few major projects which have widespread impact rather than to support numerous small projects which have little overall impact on the nature of the academic program. In addition, every possible attempt should be made to assure the long-term stability of the project. A key first step in the process is to select projects from departments where the staffing pattern is relatively stable and where the political climate is free from divisive problems which would eventually doom any project to failure. Another step toward stability is the involvement of more than one faculty member in the project, thereby

assuring that other faculty members will be able to carry on the project even if a key person leaves the institution. Finally, the agency should structure the conditions for institutional support of the project so that after the developmental stage is completed the institution will continue to support the new course as a part of its normal academic program (Diamond, 1971; Diamond et al., 1975; Haney, Lange, & Barson, 1968).

Include Evaluation

The consensus in the literature is clear that any instructional development effort must include evaluation. Evaluation can help insure more successful projects by informing the development process, but it is also important to assist the institution in judging the worth of the instructional improvement enterprise. Without adequate evaluation, it is not possible to describe accurately what was accomplished. Instructional changes, attitude changes, program effectiveness and efficiency, student learning, and faculty attitudes should all be examined as a part of the evaluation process (Diamond, 1971; Diamond et al., 1975; Engel, 1969; Gaff, 1975 b; Gerlach & Ely, 1971; Gustafson, 1971; Hamreus, 1971; Holsclaw, 1974; Lee, 1971; Popham, 1974; Schauer, 1971; Wittich & Schuller, 1973).

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